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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,006	11/30/2000	Victor L. Vines M.D.	108747.00004	3430

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06/13/2003

Thrasher Associates, LLP
391 Sandhill Dr.
Richardson, TX 75080

EXAMINER

SUN, XIUQIN

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 06/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/727,006

Applicant(s)

VINES M.D., VICTOR L.

Examiner

Xiuqin Sun

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 16-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-15 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The finality of the office action of 02/03/2003 is hereby withdrawn and replaced by the following office action.

Election/Restrictions

2. Applicant's election without traverse of inventions I and II claims 1-15 and 19-21 (claims 7-15 was originally in group II, however, in amendment dated Nov. 13, 2002, these claims were amended to be a species of amended of claim 1) in Paper No. 5 is acknowledged.

Claims 7-15 are rejoined. Claims 16-18 stand withdrawn in view of the election without traverse of paper No. 5.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 7-9 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Dimitriu et al. (U.S. Pat. No. 6361542 B1).

Dimitriu et al. disclose an obstetrical vacuum extractor cup with force measuring

Art Unit: 2863

capabilities, and teach a method of using a recording device to record a pressure in a vacuum device that is not a silicon wafer processing device (Note: the device of Dimitriu et al. is an obstetrical vacuum extractor assembly, not a silicon wafer processing device) (see Abstract), the vacuum device enabled to couple to a fetus (col. 2, lines 11-20 and lines 40-51), comprising: placing the vacuum device on a fetus, the space between the fetus and the vacuum device having a pressure (col. 4, lines 51-67); initiating a vacuum pressure in the suction device (col. 4, lines 51-67 and col. 5, lines 29-40); detecting the vacuum pressure in the suction device (col. 5, lines 1-10, lines 29-40 and lines 55-65), and automatically recording the vacuum pressure in the suction device (col. 6, lines 26-37). The system taught by Dimitriu et al. further comprises the step of engaging a monitor (col. 6, lines 26-37); the act of processing the recorded pressure to determine if the vacuum pressure is greater than a predetermined pressure (col. 5, lines 55-65); and the step of removing the suction device from the fetus (col. 5, lines 22-28).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Dimitriu et al. (U.S. Pat. No. 6361542 B1) Fisher et al. (JP 405269086 A).

Dimitriu et al. teach a method of using a recording device that records a pressure in a vacuum device that is not a silicon wafer processing device, the vacuum device enabled to couple to a fetus (see Abstract), comprising: detecting a pressure in the vacuum device (col. 5, lines 1-10, lines 29-40 and lines 55-65); recording the pressure in the vacuum device (col. 6, lines 26-37). Dimitriu et al. further teach the steps of coupling the recording device to the vacuum device and recording the pressure so that a record may be produced therefrom (Fig. 3; col. 5, lines 29-54 and col. 6, lines 26-37). Dimitriu et al. further teach the act of keeping the vacuum pressure in the suction device under a predetermined pressure level (col. 5, lines 55-65).

Dimitriu et al. do not mention that: storing a record of the pressure; said storing is achieved electronically.

Fisher et al. teach a vacuum controller that controls the pressure in a vacuum chamber. The teaching of Fisher et al. includes the step and means of storing a record of the pressure, and said storing is achieved electronically (see machine translation: abstract; and section 0018).

At the time of the invention it would have been obvious to one having ordinary skill in the art to include the teaching of Fisher et al. in the system of Dimitriu et al. The suggestion/motivation for doing so would have been to keep tracking of the variation of the measured vacuum pressure with time for further data analysis (Fisher et al.,

abstract). Therefore, it would have been obvious to combine the Fisher reference with Dimitriu in order to obtain the invention as specified in claims 1 and 3.

7. Claims 4-6 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dimitriu et al. (U.S. Pat. No. 6361542 B1) in view of Ellicott (U.S. Pat. No. 5569265).

Dimitriu et al. do not mention that generating a warning signal when a predetermined pressure level is detected. Dimitriu et al. also do not explicitly mention the steps of: altering the pressure; releasing the pressure; directing a change in the vacuum pressure, wherein the change is an increase in the vacuum pressure to move the vacuum pressure closer to atmospheric pressure, and wherein the change is a release of the vacuum pressure in order to achieve an atmospheric pressure; altering the vacuum pressure in response to a direction to change the vacuum pressure; and disengaging the vacuum pressure to achieve a local atmospheric pressure.

Ellicott discloses an obstetric bonnet for assisting childbirth, and teaches: generating a warning signal when excessive force is being applied during the operation of the device (col. 4, lines 15-20).

At the time of the invention it would have been obvious to one having ordinary skill in the art to include the suggestion of Ellicott warning generation in the system of Dimitriu et al. The suggestion/motivation for doing so would have been to alert practitioner more efficiently when a limiting or excessive force is being applied (Ellicott, col. 4, lines 21-37). Therefore, it would have been obvious to combine the Ellicott reference with Dimitriu in order to obtain the invention as specified in claim 4.

Ellicott teaches the step of altering the pressure to achieve a second pressure (col. 8, lines 30-45).

At the time of the invention it would have been obvious to one having ordinary skill in the art to add the step of altering the pressure to the method of Dimitriu. The suggestion/motivation for doing so would have been to provide improved control for the operation of the vacuum device (Ellicott, col. 8, lines 30-45). Therefore, it would have been obvious to combine the Ellicott reference with Dimitriu in order to obtain the invention as specified in claim 5.

Ellicott also teaches the step of releasing the pressure (col. 3, lines 64-67; col. 4, lines 1-8 and col. 10, lines 33-37).

At time of the invention it would have been obvious to one having ordinary skill in the art to add step of releasing the pressure to the method of Dimitriu. The suggestion/motivation for doing so would be so that the vacuum device could be safely released from the fetus's head (col. 3, lines 64-67; and col. 4, lines 1-8). Therefore, it would have been obvious to combine the Ellicott reference with Dimitriu to obtain the invention as specified in claim 6.

Ellicott further teaches the steps of: directing a change in the vacuum pressure, wherein the change is an increase in the vacuum pressure to move the vacuum pressure closer to atmospheric pressure, and wherein the change is a release of the vacuum pressure in order to achieve an atmospheric pressure (col. 8, lines 30-45 and col. 10, lines 30-38); altering the vacuum pressure in response to a direction to change

Art Unit: 2863

the vacuum pressure, and disengaging the vacuum pressure to achieve a local atmospheric pressure (col. 8, lines 30-45 and col. 10, lines 30-38).

At the time of the invention it would have been obvious to one having ordinary skill in the art to add the steps of directing a change in the vacuum pressure and altering the vacuum pressure to the method of Dimitriu. The suggestion/motivation for doing so would have been to provide improved operation of the vacuum device (Ellicott, col. 3, lines 14-18, lines 29-32). Therefore, it would have been obvious to combine the Ellicott reference and the Kawai reference with Dimitriu in order to obtain the invention as specified in claims 10-14.

8. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dimitriu et al. in view of Glenn A. Hunt, Master ASE Technician (www.mitVvac.com), [on-line], [retrieved on 1-13-2003].

Dimitriu et al. do not mention explicitly a vacuum device that comprises a MITYVAC or a disposable MITYVAC.

Hunt discloses MITYVAC pumps that can be used to create a vacuum.

At the time of the invention it would have been obvious to one having ordinary skill in the art to add a MITYVAC pump as taught by Hunt to the system of Dimitriu. The suggestion/motivation for doing so would have been to achieve a near perfect vacuum in the vacuum chamber. Therefore, it would have been obvious to combine the Hunt's reference with Dimitriu to obtain the invention as specified in claims 21 and 22.

Allowable Subject Matter

9. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Allowance

10. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claim 2 is the inclusion of the limitation that said storing is achieved mechanically. It is this limitation found in the claim, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes this claim allowable over the prior art.

Response to Arguments

11. Applicant's arguments with respect to claims 1-15 and 19-21 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-6 and 19-21 are rejected as new art (U.S. Pat. No. 6361542 B1 and U.S. Pat. No. 5569265) has been found to teach a system for monitoring a vacuum maintained in the fetal-coupled devices. Discussions are as set forth above.

With respect to claims 7-15, the applicant argued that "Dimitriu does not teach, show or suggest detecting a vacuum pressure as claimed by the applicant in claim 7, which also recites the act of recording a vacuum pressure". This argument is not persuasive. The Examiner recognizes that Dimitriu et al. indeed teach these limitations

Art Unit: 2863

when directing to a vacuum extractor for use during childbirth (see detailed discussion set forth above). For example, Dimitriu et al. teach using an optical strain gauge to sense/measure a vacuum pressure (or force) (col. 5, lines 1-3 and lines 57).

Furthermore, according to the "Merriam-Webster's Collegiate Dictionary", the Examiner read the word "recording" as "setting down in writing". It is therefore deemed that the act of recording a vacuum pressure as claimed in the instant application is an obvious equivalence to the act of displaying a record of measurement collected from a vacuum pressure device as taught by Dimitriu et al. (col. 6, lines 26-37). The mere application of a known technique to a specific instance would be within the level of ordinary skill in the art.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(1) Kawai (U.S. Pat. No. 3765408) discloses a soft obstetric vacuum cup for assisting childbirth.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136 (a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

Art Unit: 2863

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (703)305-3467. The examiner can normally be reached on 7:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (703)308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9318 for regular communications and (703)872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

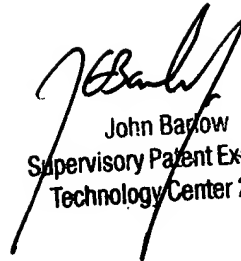
Application/Control Number: 09/727,006

Page 11

Art Unit: 2863

XS

June 10, 2003


John Barlow
Supervisory Patent Examiner
Technology Center 2800